

AMENDMENTS TO THE CLAIMS

1-9. (Cancelled)

10. (Currently Amended) An angular velocity sensor comprising:

a transducer; and

a control circuit portion ~~that drives operable to drive~~ the transducer and ~~detects to detect~~ an angular velocity applied to the transducer,

wherein the transducer includes a drive electrode portion into which is inputted a drive signal to oscillate the transducer at a specific frequency, a monitor electrode portion ~~that detects operable to detect~~ an oscillation frequency of the transducer and ~~outputs to output~~ the detected oscillation frequency as a monitor signal, and a sense electrode portion ~~that outputs operable to output~~ a sense signal which is generated due to an angular velocity applied to the transducer and is synchronized with the monitor signal, and

wherein the control circuit portion includes a correction circuit portion ~~that removes operable to remove, as a noise component, a noise~~ signal component of the sense signal detected erroneously, as if an angular velocity ~~occurred is occurring in the transducer~~ when no angular velocity is occurring in the transducer, from a signal component of the sense signal.

11. (Currently Amended) The angular velocity sensor according to Claim 10, further comprising:

a memory portion for storing in advance data to remove the noise signal component from the signal components component of the sense signal,

wherein the correction circuit portion ~~generates the is further operable to generate~~ a correction signal based on the data stored in the memory portion and the monitor signal, and to constantly ~~removes remove~~ the noise signal component from the signal components component of the sense signal by superimposing ~~the a~~ generated correction signal on the sense signal.

12. (Previously Presented) The angular velocity sensor according to Claim 11, wherein:

the memory portion includes a data input terminal for the data to be stored; and

the data input terminal is brought into a conducting state when the data is stored in the

memory portion, and brought into a non-conducting state after the data has been stored in the memory portion.

13. (Currently Amended) The angular velocity sensor according to Claim 11, wherein:

the correction circuit portion includes a ladder resistor and a switch portion ~~that adjusts operable to adjust~~ a resistance value of the ladder resistor according to the data stored in the memory portion, and ~~generates-to generate~~ the correction signal by attenuating the monitor signal using the ladder resistor.

14. (Previously Presented) The angular velocity sensor according to Claim 13, wherein:

the resistance value of the ladder resistor is set to be at least 100 times as large as a resistance value of internal resistance of the switch portion.

15. (Currently Amended) The angular velocity sensor according to Claim 10, wherein:

the noise signal component contains a first noise signal component generated in a state where a phase of the sense signal is not shifted with respect to a phase of the monitor signal; and

the correction circuit portion includes a first noise correction circuit ~~that removes~~ operable to remove the first noise signal component.

16. (Currently Amended) The angular velocity sensor according to Claim 15, wherein:

the noise signal component contains a second noise signal component except for the first noise component, that is generated due to a phase shift between the monitor signal and the sense signal; and

the correction circuit portion includes a second noise correction circuit ~~that removes~~ operable to remove the second noise signal component.

17. (Currently Amended) The angular velocity sensor according to Claim 10, further comprising:

a monitor amplifier ~~that amplifies~~ operable to amplify the monitor signal, and a sense amplifier ~~that amplifies~~ operable to amplify the sense signal,

wherein degrees of amplification of the monitor amplifier and the sense amplifier are made

equal.

18. (Currently Amended) The angular velocity sensor according to Claim 10, wherein:
the noise signal component is a signal component generated due to a mass balance of the
transducer.